

All Europe in a Schoolroom.

By R. J. HIBBERD.

THERE was a time when the world of a country child consisted of its own neighbourhood, and even now there are many children who have never been in a train for any great distance. The children of Grayswood village school, nestled in a picturesque valley beneath Hindhead, one of the beauty spots of Surrey, live in the wide, wide world. They possess a wireless station of their own. The fact that I had a wireless installation of my own greatly interested my pupils, and therefore I decided to teach them all I could about the subject. Of course, this appeared to be rather a difficult matter, owing to the lack of scientific knowledge amongst the children and the necessity of imparting knowledge in a very non-technical manner. However these difficulties were soon overcome and, thanks to the Boy Scouts and Girl Guides, who knew the Morse Code fairly well, by the second term the class was proficient enough to receive messages. Time and space will not permit me to give a technical explanation of the apparatus used, but perhaps an opportunity will be afforded me to do so in a further edition of the Magazine. The aerial, sometimes termed the antenna, is fixed from an old wind mill tower to a school chimney. To it is joined the "lead in," which is connected to the instruments in the school. These consist of a three-valve receiver and amplifier connected to a piece of apparatus called a "loud speaker"; the whole instrument making one of the most up-to-date wireless stations in the country. A valve receiver differs from the old-fashioned spark receiving set, in this respect, that it magnifies the signals received. Thus weak signals received on the school set are magnified no less than three hundred times, thus making them easily audible to a class of 60 children. Not only that, speech and music can be received, and only quite recently the children listened to selections from famous composers which was being played by an orchestra at Konigs Wusterhausen in Germany. Cross channel aeroplanes keep in touch with land stations throughout their journey, by means of wireless telephony. Their conversations are easily "picked up," such as this: "Tell Smith to bring my gloves back on his return from Paris. Cheerio, Ginger." Perhaps a recent Press description will give you an idea of what use wireless is made in

school. "The boys moved about amidst a collection of instruments, switches, vulcanite handles, coils, and all the fascinating apparatus associated with wireless. And very happy they were, too, with this practical form of experimenting. One boy with a pair of telephones to his ears was waiting for the time signals from Paris, 350 miles away. Another boy was listening for the weather report from Poldhu. 'See if you can detect any thunderstorms,' said the schoolmaster, as a youth with the magic of wireless delved into the secrets of the atmosphere many hundreds of miles away. How much more interesting schools are becoming, for the installations of wireless in this little country school provided almost all the lessons with an added touch of novel interest. The weather reports were used in connection with physical geography, the detection of thunderstorms played an important part in the science lesson, and the calculation of wireless wave lengths provided novelty in arithmetic, and so on throughout the school work the wireless station played a useful part in making school hours fly."

I hope this little article will inspire other schools to make further efforts for the cause of wireless, for I feel it should form an essential subject in all types of schools. Distance has been annihilated by wireless telephony, and I venture to predict that the time will come when a number of schools scattered over a wide area will receive lectures from one professor speaking into a radio telephone transmitter at London University.